

ABSTRACT

METHOD AND SYSTEM TO COMPENSATE FOR LAMP INTENSITY DIFFERENCES IN A PHOTOLITHOGRAPHIC INSPECTION TOOL

5 An after develop inspection tool considers tool-to-tool
variability when determining confidence score for wafers under
inspection. A golden wafer is used to calculate a RGB signature as well
as the slope of the individual RGB curves for different lamp intensities.
These slopes are normalized in order to generate a compensation factor
for red values and blue values within a signature. When a wafer is
10 subsequently inspected at an ADI station using a different lamp, the test
wafer RGB signature is likely captured at a different lamp intensity.
Consequently, when comparing the signatures, the golden wafer RGB
signature is adjusted by the compensation factors, based on the different
lamp's intensity setting, and this adjusted RGB signature is then used to
15 determine whether a defect exists on the test wafer.